## (19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 14 October 2004 (14.10.2004)

PCT

(10) International Publication Number WO 2004/088936 A3

(51) International Patent Classification<sup>7</sup>: H04L 12/28

H04Q 7/38,

(21) International Application Number:

PCT/IB2004/000952

- (22) International Filing Date: 24 March 2004 (24.03.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

03100855.0

1 April 2003 (01.04.2003) EP

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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

with international search report

(88) Date of publication of the international search report: 20 January 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DISCOVERING PROXIMATE APPARATUSES AND SERVICES IN A WIRELESS NETWORK

(57) Abstract: A searching apparatus in a wireless network with at least three base stations is put in the position of identifying the available apparatuses and services which are in its proximity, in that the apparatuses  $G_i$  ( $i \neq k$ ) determine the signal strengths ss(i, j) at which they receive signals from the base stations  $B_i$ , and the apparatuses to be discovered send these signals to a searching apparatus  $G_k$ .

## INTERNATIONAL SEARCH REPORT

Internamental Application No PCT/IB2004/000952

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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H04Q7/38 H04L12/28									
According to International Patent Classification (IPC) or to both national classification and IPC									
B. FIELDS SEARCHED									
Minimum documentation searched (classification system followed by classification symbols)  IPC 7 H04Q H04L									
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched									
Electronic data base consulted during the International coarse (some of data base)									
Electronic data base consulted during the International search (name of data base and, where practical, search terms used)  EPO-Internal									
C. DOCUMENTS CONSIDERED TO BE RELEVANT									
Category °	Citation of document, with indication, where appropriate, of the rel	levant passages		Relevant to claim No.					
X	WO 03/021851 A (NEWBURY NETWORKS 13 March 2003 (2003-03-13)		1-10						
	paragraph '0010! paragraph '0037! - paragraph '0040! paragraph '0049!								
	paragraph '0053! - paragraph '0056!								
paragraph '0057! paragraph '0063!									
Α	US 2002/111173 A1 (TANAKA HIROHIS AL) 15 August 2002 (2002-08-15)	1–10							
	paragraph '0009! paragraph '0044!								
A	EP 0 794 681 A (BOSCH GMBH ROBERT 10 September 1997 (1997-09-10)	1-10							
	sentence 20 - sentence 50								
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	per documents are listed in the second state of the second state o								
	er documents are listed in the continuation of box C.	X Patent family m	nembers are listed in	annex.					
*Special categories of died documents:  "A" document defining the general state of the art which is not  "A" document defining the general state of the art which is not									
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## INTERNATIONAL SEARCH REPORT

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Interimanal Application No PCT/IB2004/000952

					101/102004/000932	
Patent document cited in search report		Publication date		Patent family member(s)	Publication date	
WO 03021851	Α .	13-03-2003	CA EP WO US	2459920 A1 1436639 A2 03021851 A2 2003043073 A1	13-03-2003 14-07-2004 13-03-2003 06-03-2003	
US 2002111173	A1	15-08-2002	AU AU AU WO WO US US	6977101 A 0197543 A1 6685101 A 6826501 A 6977001 A 0197541 A1 0197542 A1 0197544 A1 2002090954 A1 2002107008 A1 2002086676 A1	24-12-2001 20-12-2001 24-12-2001 24-12-2001 24-12-2001 20-12-2001 20-12-2001 20-12-2001 11-07-2002 08-08-2002 04-07-2002	
EP 0794681	A	10-09-1997	DE EP	19608942 A1 0794681 A2	18-09-1997 10-09-1997	